

Possible Temperature Sensor Installation

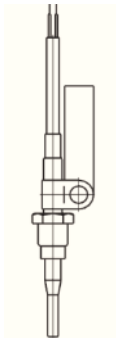


www.diehl.com/metering

Temperature sensors – mechanical versions

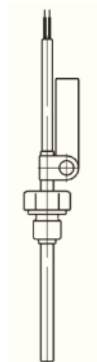
General overview according EN 1434

DS
(direct short)



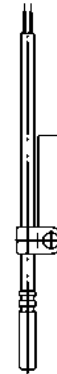
direct diving short
sensor

DL
(direct long)



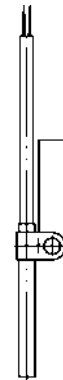
direct diving long
sensor

PS
(pocket short)



in pocket diving short
sensor

PL
(pocket long)

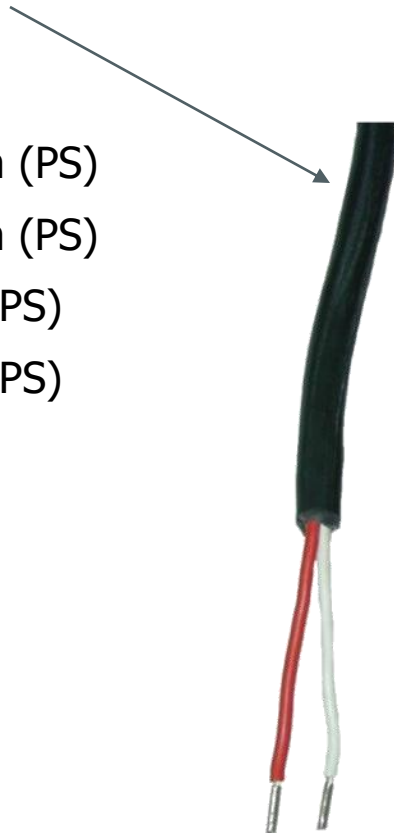


in pocket diving long
sensor

The types PL and DL could be temperature sensors with head or be equipped with a fixed cable (cable sensor). The type DS is only equipped with a fixed cable.

2-wire sensor:

- Pt 100 Ø 5,2 mm (PS)
- Pt 500 Ø 5,2 mm (PS)
- Pt 100 Ø 6 mm (PS)
- Pt 500 Ø 6 mm (PS)
- Pt 100 (DS)
- Pt 500 (DS)



4-wire sensor:

- Pt 500 Ø 6 mm (PL)



Specification | temperature sensor type DS

- Pt 100 or Pt 500, 2-wire
- Diameter 3.3 mm or 3.6 mm
- Length 27.5 mm or 38 mm
- Cable length 2 m
- MID approval
- Direct installation e. g. in ball valve
- Available for the application in heating systems



Specification | temperature sensor type PS

- Pt 100 or Pt 500, 2-wire
- Diameter 5.0 / 5.2 or 6 mm
- Length 45 mm
- Cable length 2 / 3 / 5 or 10 m
- MID approval and national German approval according PTB K7.2 (cooling)
- Direct installation (installation set) or indirect via pocket
- Available for the application in heating, cooling or heating/cooling systems



Specification | temperature sensor type PL

- Pt 100 or Pt 500, 2- or 4-wire
- Diameter 6 mm
- Length 105 / 140 or 230 mm
- Cable length 3 or 5 m
- MID approval and national German approval according PTB K7.2 (cooling)
- Only indirect installation via pocket
- Available for the application in heating, cooling or heating/cooling systems



2-wire sensor

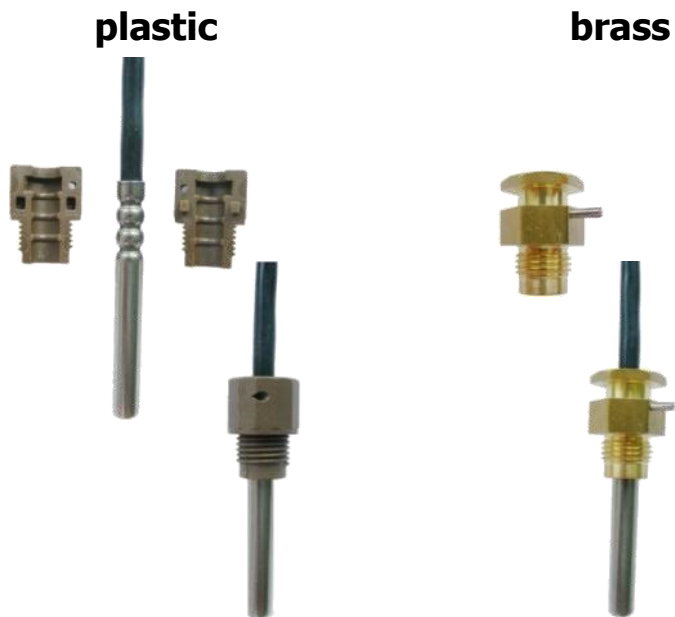
Type	Cable length
Pt 100	2 m
Pt 500	2 / 3 / 5 / 10 m



Variants of installation (PS sensor)

Direct installation

With adapter (plastic or brass)
only for 5.2 mm sensor

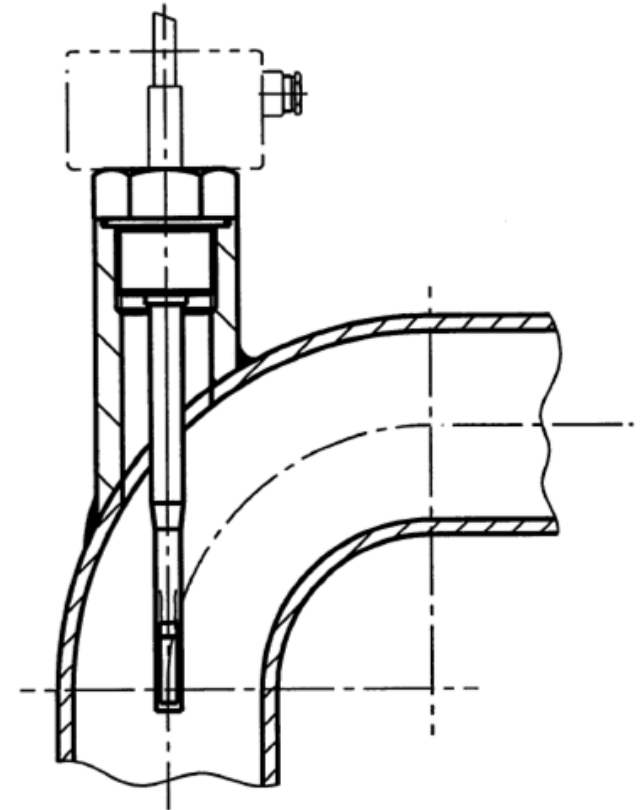


Installation via pockets



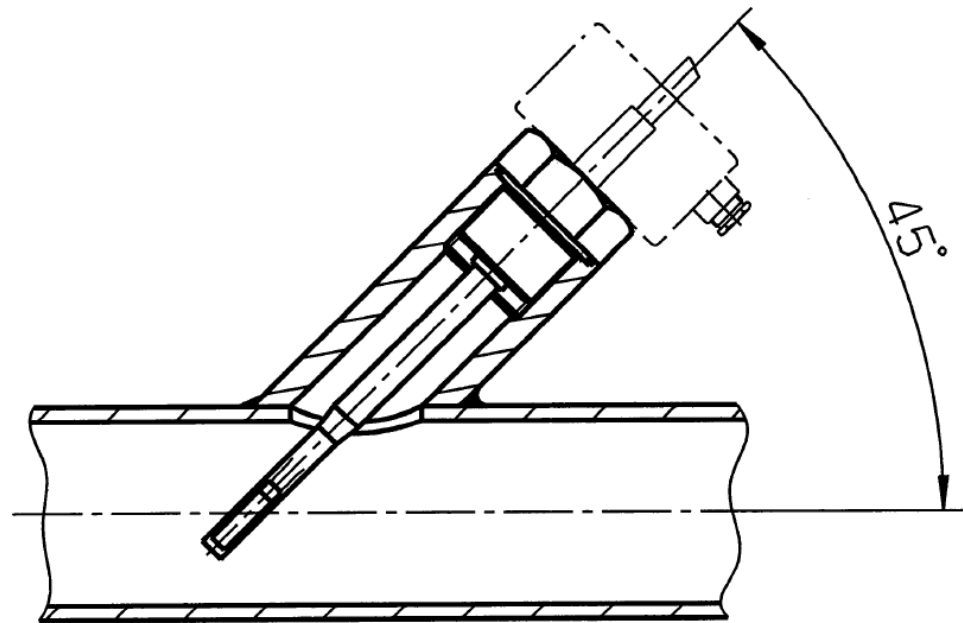
Installation example #1

Installation in an elbow for pipe diameter \leq DN 50, for long temperature sensors



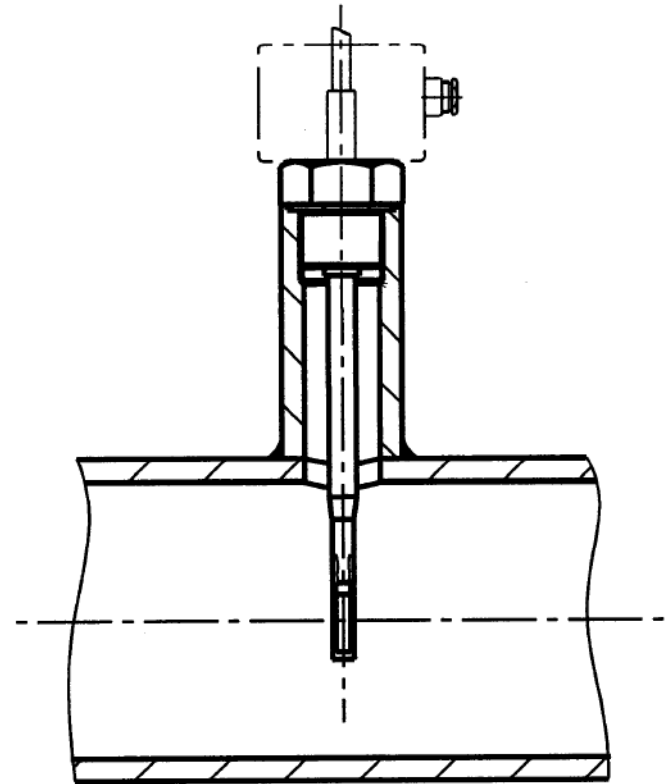
Installation example #2

Installation for pipe diameter \leq DN 50, for direct installation, diagonal to the flowdirection



Installation example #3

Installation for pipe diameter from DN 65 up to DN 250 for screwing installation in pockets, vertical to the flow direction

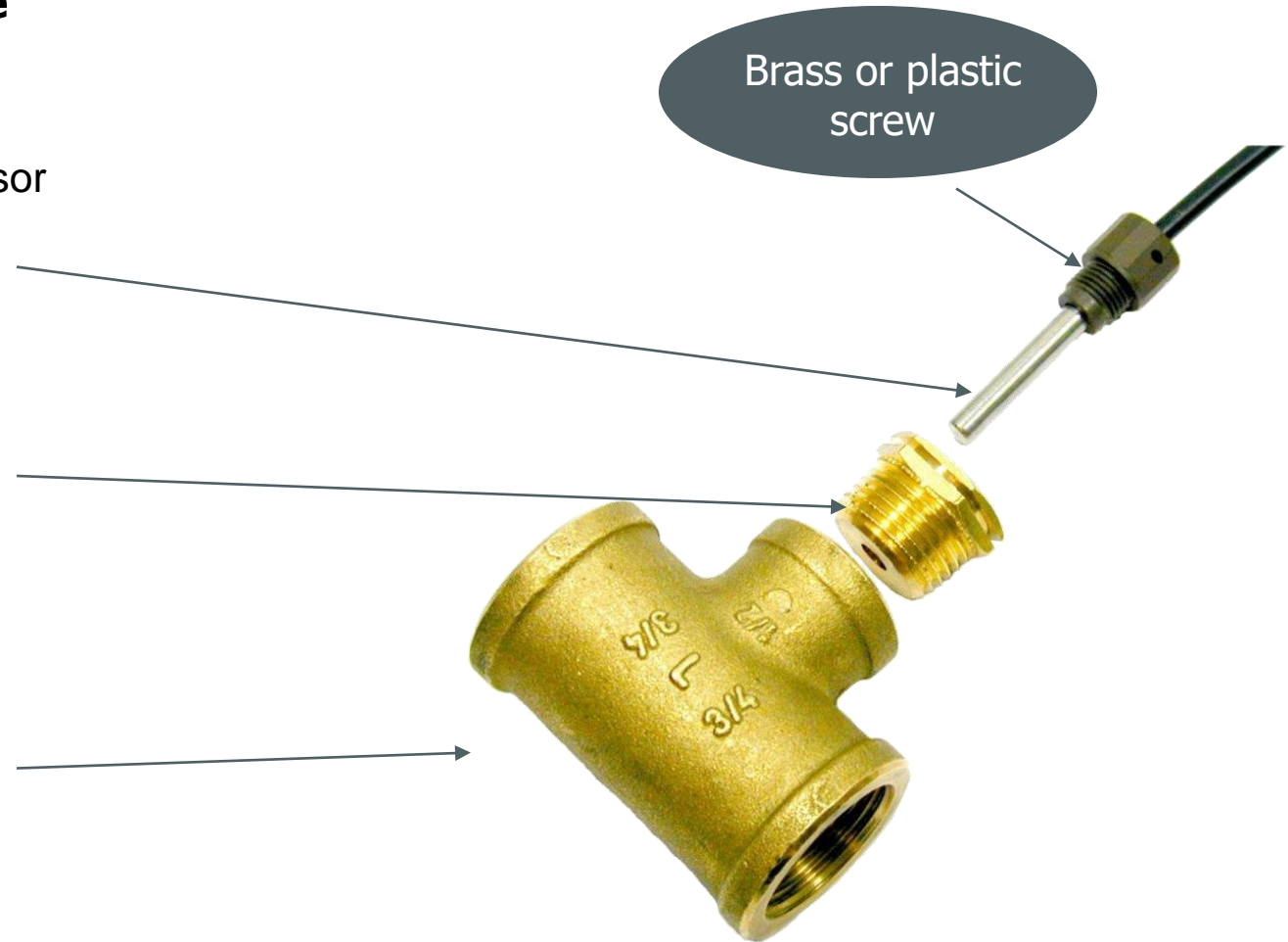


Adapter and T-piece

Temperature sensor
Ø 5.2 mm

Adapter
(1/2" x M10x1)

T-piece 3/4"



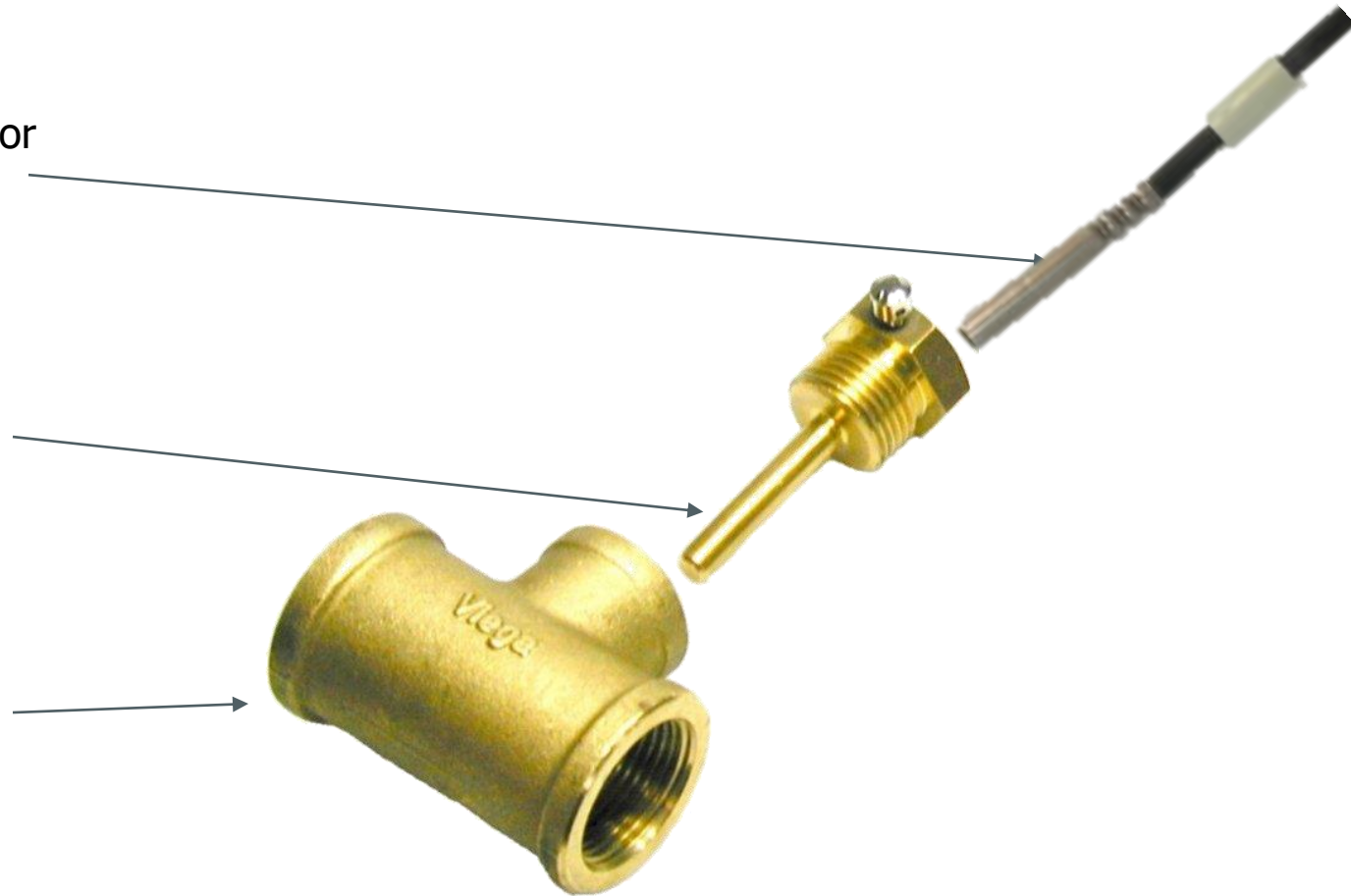
Variants of installation (type PS, standard) Ø 5.2 mm

Pocket and T-piece

Temperature sensor
Ø 5.2 mm

Pocket
(1/2")

T-piece 3/4"

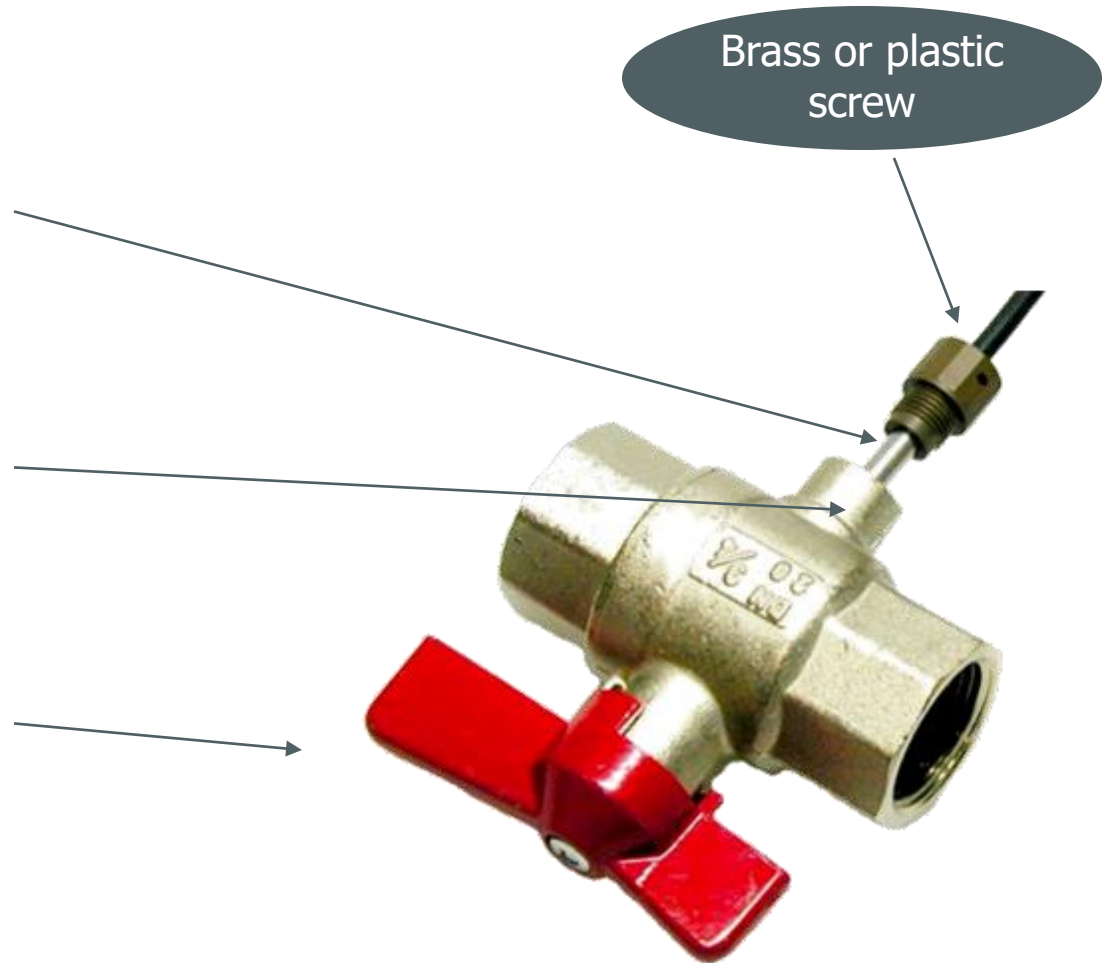


Ball valve

Temperature sensor
Ø 5.2 mm

Thread inside M10x1

Ball valve 3/4"

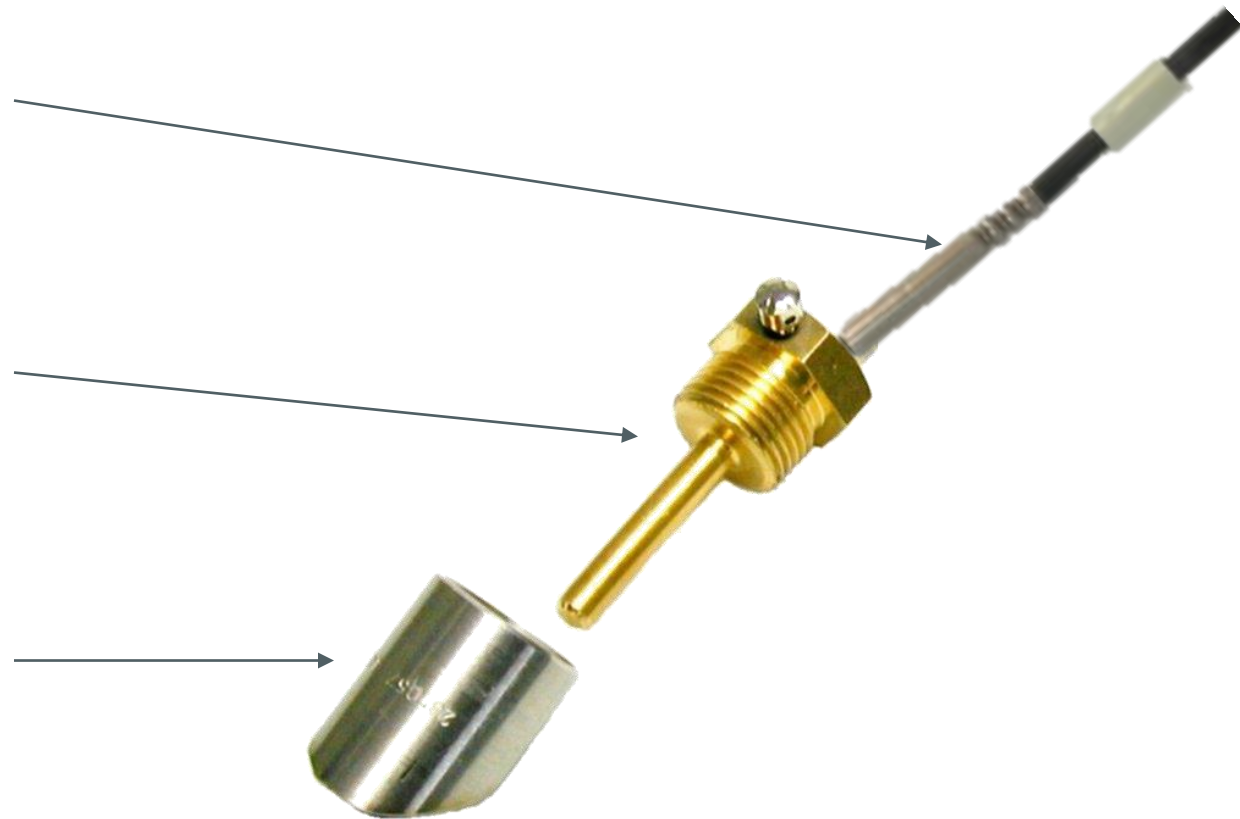


Pocket and welded sleeve 45°

Temperature sensor
Ø 5.2 mm

Pocket
(1/2")

Welded sleeve 45°
(1/2")

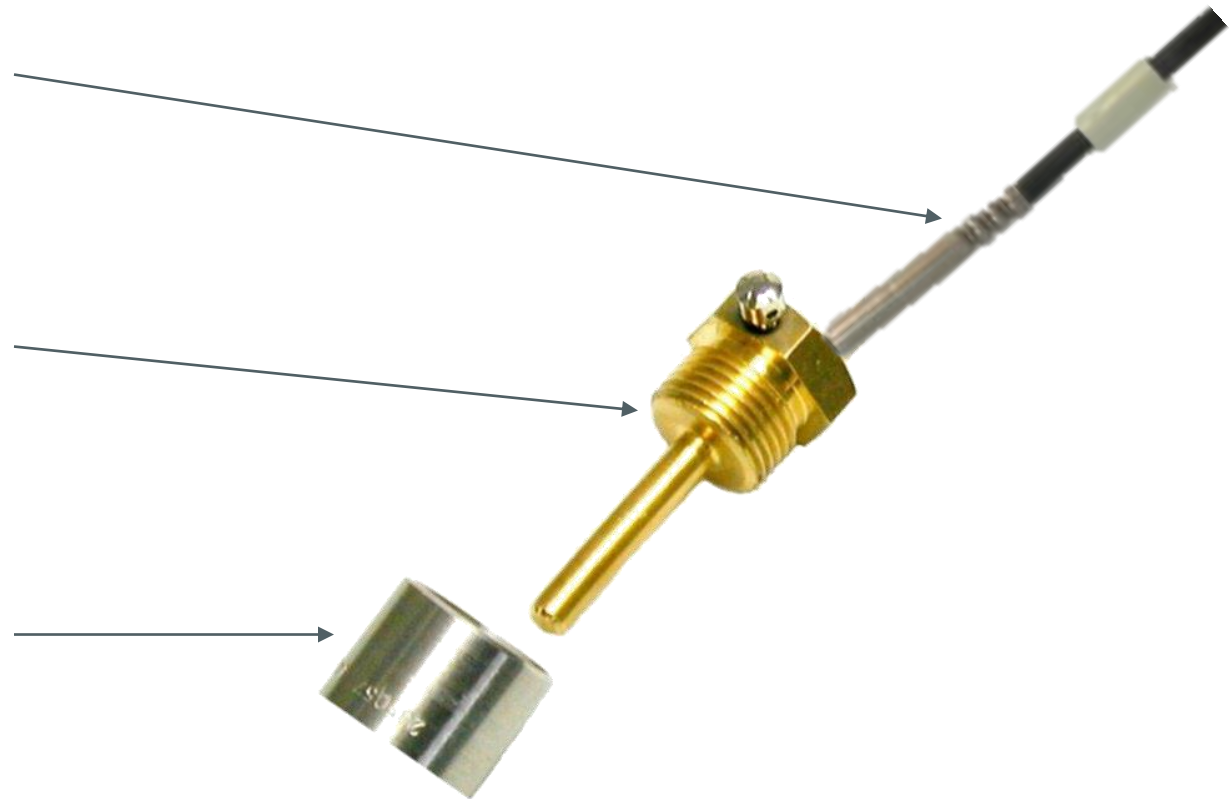


Pocket and welded sleeve 90°

Temperature sensor
Ø 5.2 mm

Pocket
(1/2")

Welded sleeve 90°
(1/2")



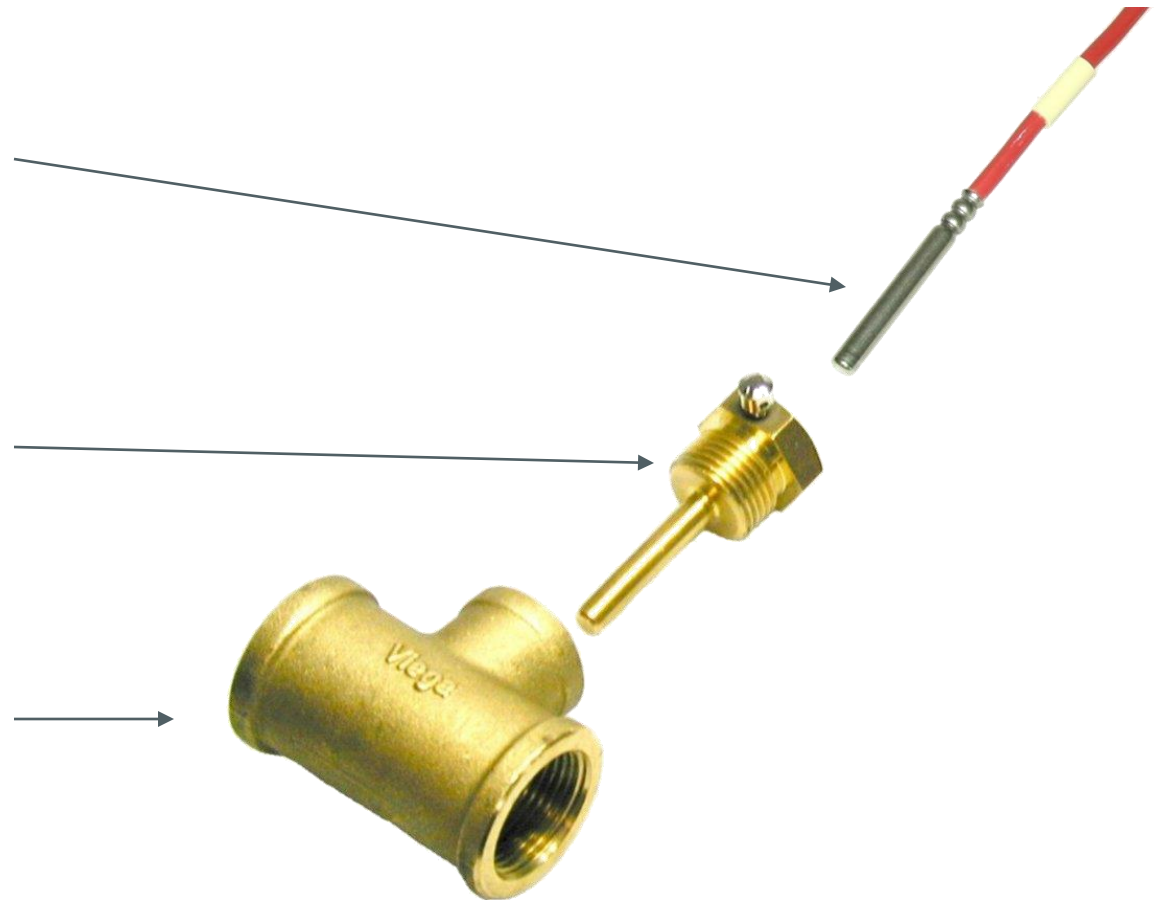
Variants of installation (type PS) Ø 6 mm

Pocket and T-piece

Temperature sensor
Ø 6 mm

Pocket
(1/2") for 6 mm sensor

T-piece 3/4"



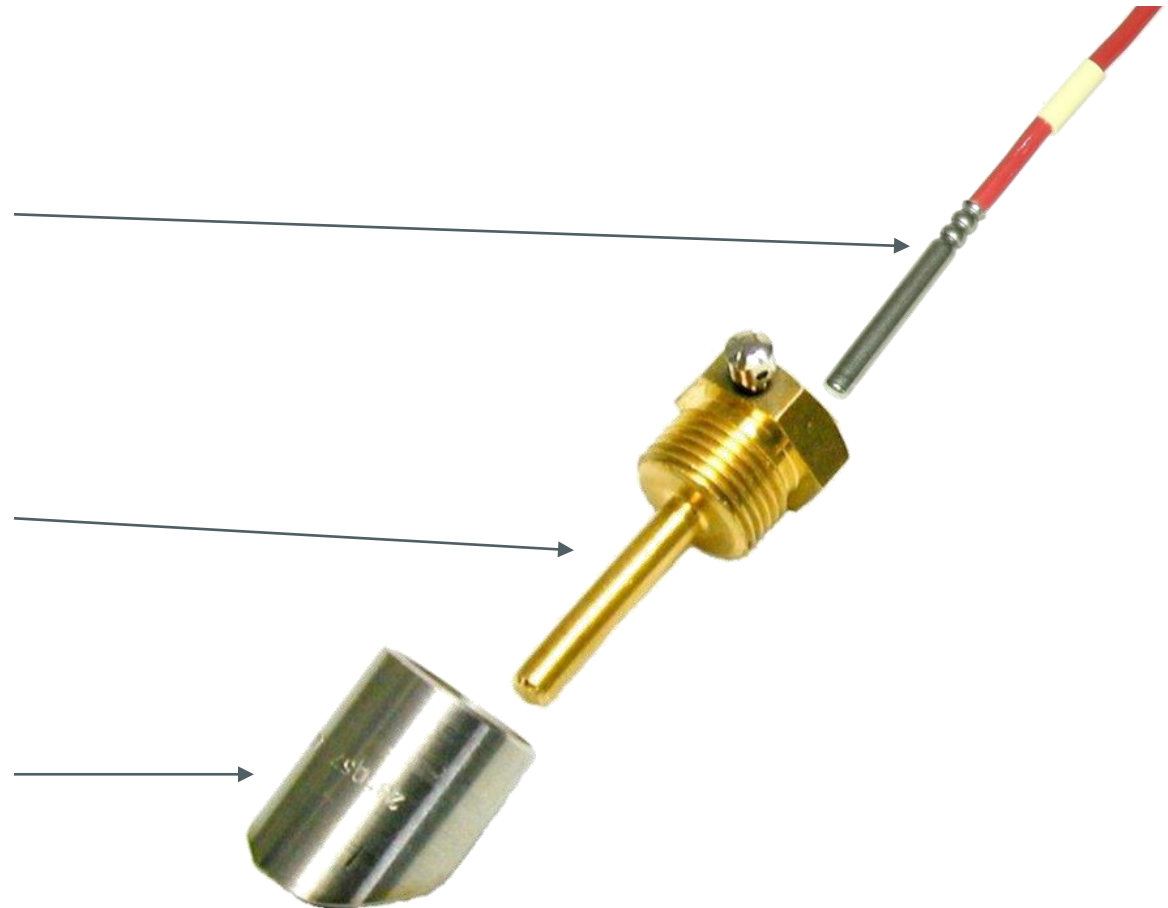
Variants of installation (type PS) Ø 6 mm

Pocket and welded sleeve 45°

Temperature sensor
Ø 6 mm

Pocket
(1/2") for 6 mm sensor

Welded sleeve 45°
(1/2")



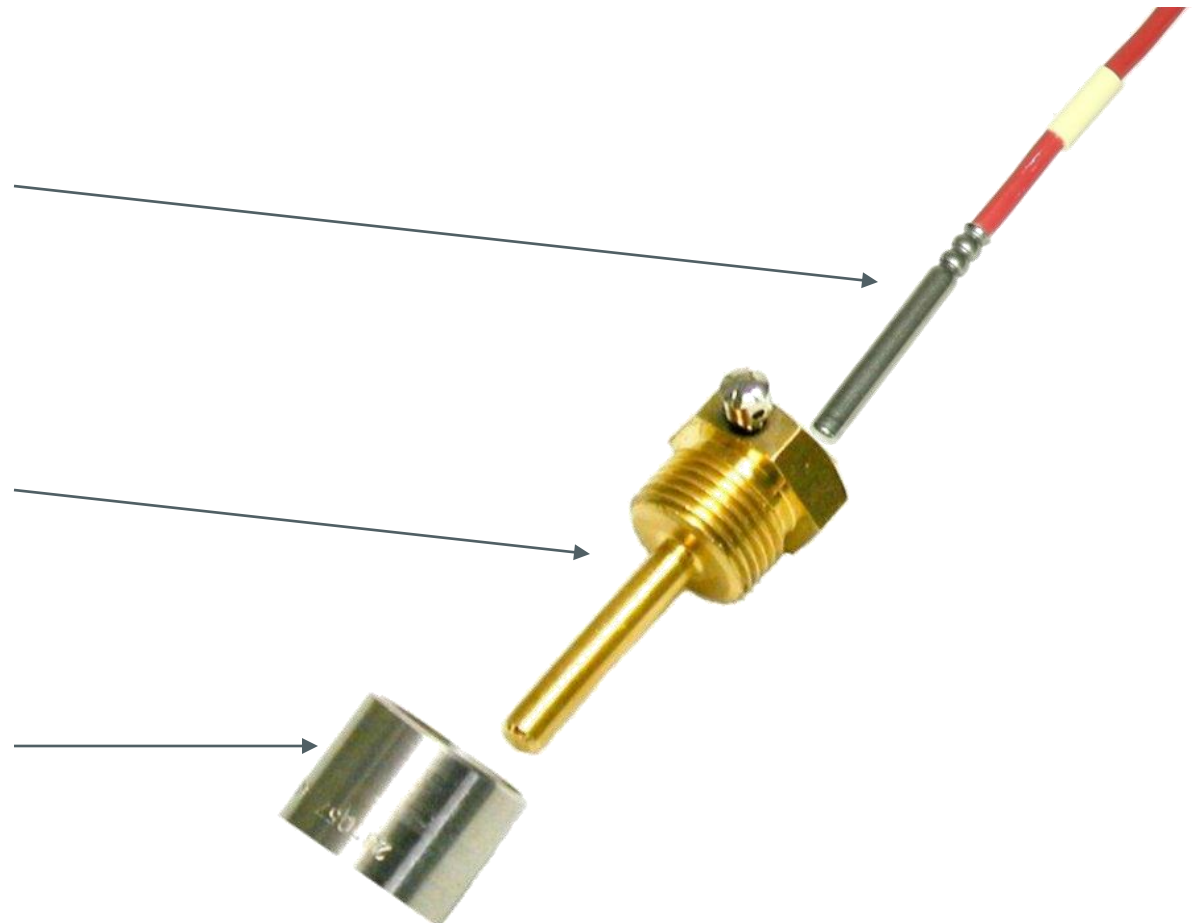
Variants of installation (type PS) Ø 6 mm

Pocket and welded sleeve 90°

Temperature sensor
Ø 6 mm

Pocket
(1/2") for 6 mm sensor

Welded sleeve 90°
(1/2")

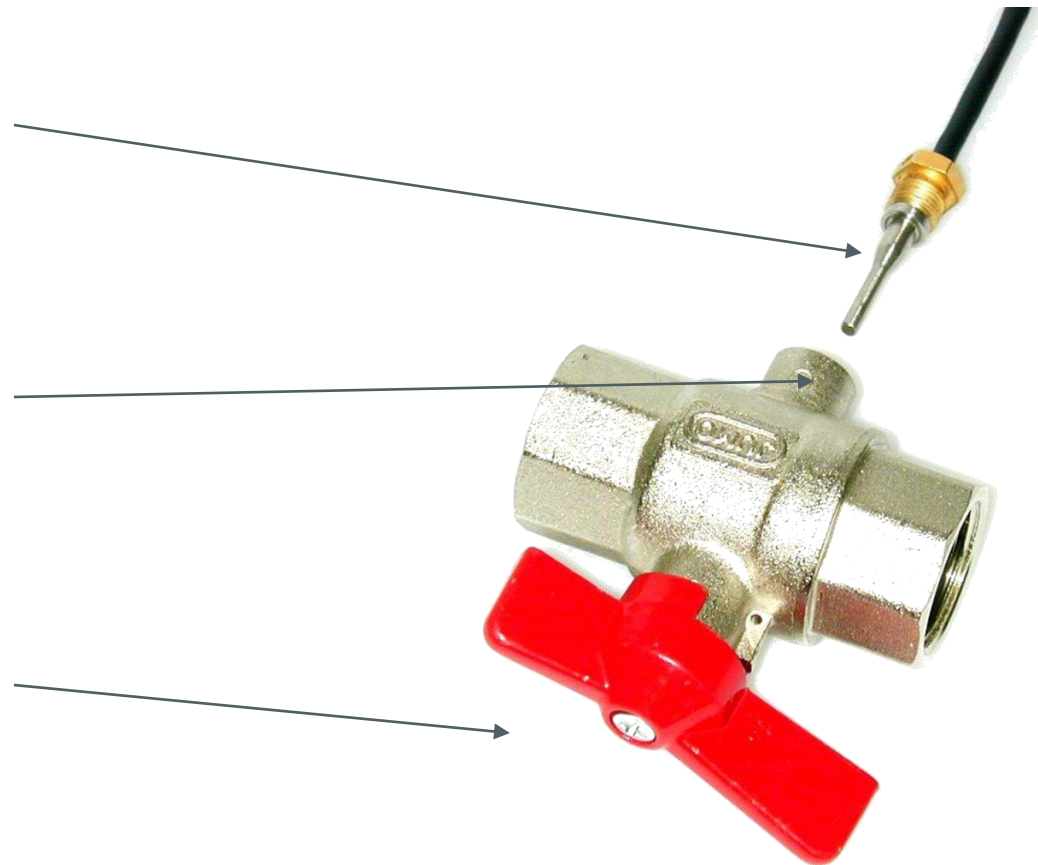


Ball valve

Temperature sensor
(DS)

Thread inside M10x1

Ball valve $\frac{3}{4}$ "

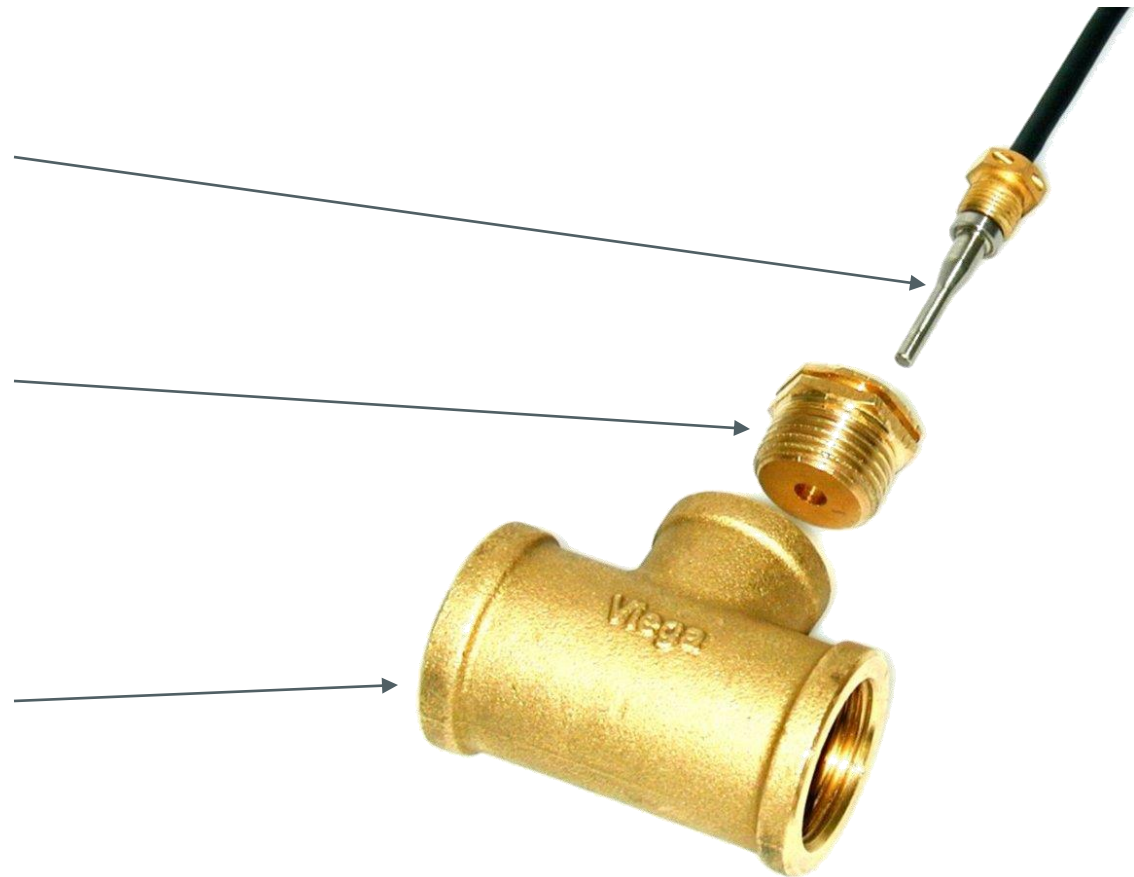


Adapter and T-piece

Temperature sensor
(DS)

Adapter
(1/2" x M10x1)

T-piece 3/4"



Pockets for 5.2 mm temperature sensors

Brass

Approval	Nominal diameter	DN 15/20/25/32	DN 40/50/65	DN 80/100/125	DN 150
MID	Length L1	35 mm	52 mm	85 mm	120 mm
	Article-No. (1 piece)	3002684	3002685	3004406	3004407



Pockets for 5.2 mm temperature sensors

Stainless steel

Approval	Nominal diameter	DN 15/20/25/32	DN 40/50/65	DN 80/100/125	DN 150
MID	Length L1	85 mm	120 mm	155 mm	210 mm
	Article-No. (1 piece)	3009835	3009836	3009837	3009838



Pockets for 6.0 mm temperature sensors

Brass

Approval	Nominal diameter	DN 25/32/40/50/65	DN 80/100/125	DN 150/200
MID	Length L1	40 mm	85 mm	120 mm
	Article-No. (1 piece)	3002686	3004408	3004409



Pockets for 6.0 mm temperature sensors

Stainless steel

Approval	Nominal diameter	DN 80/100/125	DN 150/200	DN 200/250	DN 300
MID	Length L1	85 mm	120 mm	155 mm	210 mm
	Article-No. (1 piece)	3009839	3009840	3009841	3009842



Accessories temperature sensor

Adapter Brass		Installation Set Brass	Installation Set Plastics	Ball valves		
1 piece	32 piece	20 pcs.	20 pcs.	1 pcs.	2 pcs.	12 pcs.
G$\frac{1}{2}$" - M10x1 - 3032509 3032547		3001303	3001305	G$\frac{1}{2}$" DN 15 - 3032540	3032543	3032506
				G$\frac{3}{4}$" DN 20 - 3032541	3032544	3032507
				G1" DN 25 - 3032542	3032545	3032508



